

**THE REEFBASE PACIFIC PROJECT AND INFORMATION PORTAL:  
DELIVERING INFORMATION OF REEF ASSOCIATED LIVELIHOODS,  
FISHERIES AND BIODIVERSITY**

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**Abstract:** Effective management and sustainable use of coral reefs and associated fisheries and socioeconomic systems rely on incorporating current and relevant information into decision-making processes. Where information is poorly managed and mobilized, scientists, managers and policy makers may be unable to take full advantage of information and experience that already exist. The ReefBase Pacific project has increased accessibility and availability of information about coral reef resources, their status and threats, to support the development of knowledge and informed decisions relating to reef resources in the Pacific. Provided here are details of the project and its approach to management and mobilization of this information to a wide range of stakeholders and users.

**Keywords:** coral reefs, reef fish, reef fisheries, reefs, coastal fisheries, fishing, marine resources, management, policies, legislation, economics

## **Introduction**

Effective management and sustainable use of coral reefs and associated fisheries and socioeconomic systems rely on incorporating current and relevant information into decision-making processes. Where information is poorly managed and mobilized, scientists, managers and policy makers may be unable to take full advantage of information and experience that already exists. This failure to capture the benefits of existing knowledge can often be due to the lack of information accessible, considering time and resources available. Providing information systems that are organized, user-friendly and appropriately presented can encourage stakeholders to access and capture information to support the development of knowledge and informed decision.

The ReefBase Pacific project has improved both accessibility and availability of information to support reef resource management, science and education in the Pacific region. Provided below is a summary of the project and its approach to management and mobilization of this information to a wide range of stakeholders.

### **What is ReefBase?**

ReefBase is a web based global database of information relating to reef resources of the world ([www.reefbase.org](http://www.reefbase.org)). This system stores and serves an extensive reef related data to a large international audience of people (19 000+ people per month) with interests in reefs and associated systems. In addition to constantly updating the website and master database, the ReefBase team is involved in a growing number of projects, involving collation of reef associated data sets and the production of databases and other science based outputs, that meet the expressed needs of stakeholders (e.g. GEF Lessons Learned database [www.reefbase.org/gefl](http://www.reefbase.org/gefl), MPAs of East Asia and Micronesia [www.reefbase.org/key\\_topics/coralreefmpas.aspx](http://www.reefbase.org/key_topics/coralreefmpas.aspx)). All ReefBase Pacific projects can be viewed at [www.reefbase.org/projects\\_partners/projects.aspx](http://www.reefbase.org/projects_partners/projects.aspx).

### **What is the history of ReefBase?**

Launched in 2002, ReefBase was developed by the WorldFish Center ([www.worldfishcenter.org](http://www.worldfishcenter.org)) in collaboration with the International Coral Reef Action Network. Following the success of its collaborative and comprehensive online resource FishBase, WorldFish envisioned ReefBase as a similar global information system but focused on coral reefs and the communities that depend on them. ReefBase thus strongly supports the WorldFish mission to reduce poverty and hunger by improving fisheries and aquaculture. The WorldFish Center continually investigates and develops the role of ReefBase to ensure it continues to meet and adapt to the needs of people involved in reef associated management and research.

### **What is ReefBase Pacific?**

ReefBase Pacific is a project of the Coral Reef InitiativeS of the Pacific (CRISP - [www.crisponline.org](http://www.crisponline.org)) and is the first regional focus of ReefBase. The project is executed by the WorldFish Center, and involves a team made up of the ReefBase (global) team and partners in the Pacific region: University of the South Pacific, Secretariat of the Pacific Regional Environment Programme, Secretariat of the Pacific Community, Le Centre de Recherches Insulaires et Observatoire de l'Environnement and the Global Coral Reef Monitoring Network.

### **What are the objectives of the ReefBase Pacific Project?**

Our stakeholders in the Pacific, including reef managers, students and scientists experience particular issues in terms of marine information management, access and distribution. These include a lack of resources for addressing information management issues, poor access to and lack of comprehensive physical collections, poor access to the internet, gaps in existing online repositories, poor flow of information into the public domain and in general, a lack of information relating to Pacific inshore and reef resource

use, status and management (PIMRIS (2007), ReefBase Pacific (2007), SPC (2006), Fa'asili and Williams (1987), IODE (2004) , SPC et al. (1987)).

Against this background, ReefBase Pacific was designed and implemented, with the goal of improving access and availability of information to support effective reef associated resource management, conservation, research and education in the region. The ReefBase Pacific team works closely with formal technical partners and other key stakeholders to realize the following objectives of the project:

- To develop a collaborative and region-wide network of professionals involved in reef fisheries and coral reef research, conservation, and management in the South Pacific that will effectively share data, information and experience
- To assemble an unprecedented knowledge-base on reef fisheries and coral reef resources monitoring, conservation and management in the Pacific
- To utilize the network and knowledge- base to establish an easily accessible information system which provides researchers, managers and local stakeholders with instant access to relevant information for the sustainable use of coral reef resources in the Pacific
- To widen the scope, impact, and effectiveness of current reef fisheries and coral reef management, conservation and information sharing activities, across Melanesia, Micronesia, and Polynesia

#### **What are the relationships of ReefBase Pacific with other information service agencies in the region and beyond?**

ReefBase Pacific has established a range of partnerships with regional organizations, global data management projects, non-government organizations and government partners in Pacific Island Countries. Due to these partnerships it has been possible to ensure that ReefBase Pacific activities and systems build on, strengthen and network with existing systems and initiatives. The ReefBase Pacific team maintains constant dialogue and coordination with partners to ensure that efforts are appropriately directed to provide maximum benefit to the region.

In terms of building a digital library, the ReefBase Pacific project has focused on literature that has not to date been captured by existing digital libraries. The systems and data standards used support networking with other systems now and in the future, thereby providing a mechanism to contribute to the broader pool of literature relevant to marine and coastal systems of the Pacific.

#### **What are the achievements of the ReefBase Pacific project?**

The ReefBase Pacific project has developed with partners, information products that meet the needs of our stakeholders in the region. These include a large database of publications, images, projects, and details of key people and organizations; due to the

activities of the project much of this information is for the first time easily accessible. This database has been made available on the ReefBase Pacific website (<http://pacific.reefbase.org/>) and a DVD produced in late 2007. An updated version of the DVD will be produced and distributed by early 2009, and this will include an auto-update function to allow users to update their database with the latest additions to the master ReefBase Pacific system.

The project has also produced an annotated bibliography of socio-economic and ecological impacts of marine protected areas of Pacific Island Countries, and is shortly due to complete a bibliography of information relating to the marine protected areas of French Polynesia.

The project contributes to the production of the report 'Status of the Coral Reefs of the World' with the Global Coral Reef Monitoring Network and CRISP; this report will be made freely available in database, electronic and printed formats. The project has also produced 'Pacific ReefGIS' which captures and presents information relating to reef locations, monitoring activities, threats to reefs, images of reefs and more.

These and other outputs of the ReefBase Pacific project can be viewed and downloaded at <http://pacific.reefbase.org>.

#### **How does the ReefBase Pacific project ensure the use of this information?**

In addition to the production and dissemination of information products, the ReefBase Pacific team is involved in activities in the region, and globally, to ensure that relevant and useful information reaches the people who need it; the team considers that information mobilization is a critical component of this project.

Both ReefBase, and the ReefBase Pacific projects and products are presented at international events that focus on coral reefs, fisheries, marine education and information management. ReefBase Pacific information products and interactive research activities have been delivered at the University of the South Pacific, University of French Polynesia and numerous regional reef related workshops. These resources will be provided to courses in the longer term to ensure that these information resources are available and utilized by both current and future students.

#### **How often is ReefBase Pacific database updated?**

The ReefBase Pacific team continually identifies, gathers and inputs information of value to our stakeholders. The ReefBase Pacific team also maintains connections with regional and global data management initiatives to ensure there is a consistent flow of data into the system through established connections.

#### **What is the future of ReefBase?**

The long term objective of ReefBase is to act as a secure repository for reef associated data, to continue to serve data for reef associated management, conservation, research and education, and to adapt and improve systems to address the evolving needs of

stakeholders. The ongoing update and maintenance of both ReefBase is an ongoing function of the WorldFish Center. By playing a role in ongoing and future projects, established systems and data sets will be updated and further developed to ensure that ReefBase systems continue to contribute to addressing the information management needs globally and in the Pacific region.

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